

Abstract

Sub 71 Processes for inhibiting flower formation and processes for inducing flower formation in plants, and processes for improving the storage capability of storage organs of useful plants and processes for reducing the sprouting of tubers in tuberous plants are described.

Also described are DNA sequences which modify the activity of the citrate synthase of the plant upon integration into a plant genome, plasmids which contain these DNA sequences and transgenic plants in which modifications in the activity of the citrate synthase are brought about by introducing the DNA sequences.

The described DNA sequences are sequences from *Solanum tuberosum*, *Nicotiana tabacum* and *Beta vulgaris* which code for the enzyme citrate synthase.

The invention also describes transgenic potato plants in which an inhibition of flower formation, a reduction in the storage losses of the tubers, and a reduction in the sprouting of the tubers comes about because of an inhibition of the citrate synthase activity, and transgenic potato plants in which a premature induction of flower production comes about because of the over-expression of a citrate synthase.